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APPLICATION NO.	FILING DATE	FIRST NAMED INVENTOR	ATTORNEY DOCKET NO.	CONFIRMATION NO.
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09/456,042

12/06/1999

ROBERT F. BONNER

15280-347100

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12/20/2001

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EXAMINER

GABEL, GAILENE

ART UNIT

PAPER NUMBER

1641

DATE MAILED: 12/20/2001

Please find below and/or attached an Office communication concerning this application or proceeding.

## Office Action Summary

Application No.

09/456,042

Applicant(s)

BONNER ET AL.

Examiner

Gailene R. Gabel

Art Unit

1641

-- The MAILING DATE of this communication appears on the cover sheet with the correspondence address --

### Period for Reply

A SHORTENED STATUTORY PERIOD FOR REPLY IS SET TO EXPIRE 3 MONTH(S) FROM THE MAILING DATE OF THIS COMMUNICATION.

- Extensions of time may be available under the provisions of 37 CFR 1.136(a). In no event, however, may a reply be timely filed after SIX (6) MONTHS from the mailing date of this communication.
- If the period for reply specified above is less than thirty (30) days, a reply within the statutory minimum of thirty (30) days will be considered timely.
- If NO period for reply is specified above, the maximum statutory period will apply and will expire SIX (6) MONTHS from the mailing date of this communication.
- Failure to reply within the set or extended period for reply will, by statute, cause the application to become ABANDONED (35 U.S.C. § 133).
- Any reply received by the Office later than three months after the mailing date of this communication, even if timely filed, may reduce any earned patent term adjustment. See 37 CFR 1.704(b).

### Status

- 1) ☒ Responsive to communication(s) filed on 01 October 2001.
- 2a) ☐ This action is FINAL. 2b) ☒ This action is non-final.
- 3) ☐ Since this application is in condition for allowance except for formal matters, prosecution as to the merits is closed in accordance with the practice under *Ex parte Quayle*, 1935 C.D. 11, 453 O.G. 213.

### Disposition of Claims

- 4) ☒ Claim(s) 1-46 is/are pending in the application.
- 4a) Of the above claim(s) 16-46 is/are withdrawn from consideration.
- 5) ☐ Claim(s) \_\_\_\_\_ is/are allowed.
- 6) ☒ Claim(s) 1-15 is/are rejected.
- 7) ☐ Claim(s) \_\_\_\_\_ is/are objected to.
- 8) ☒ Claim(s) 1-46 are subject to restriction and/or election requirement.

### Application Papers

- 9) ☐ The specification is objected to by the Examiner.
- 10) ☐ The drawing(s) filed on \_\_\_\_\_ is/are: a) ☐ accepted or b) ☐ objected to by the Examiner.  
Applicant may not request that any objection to the drawing(s) be held in abeyance. See 37 CFR 1.85(a).
- 11) ☐ The proposed drawing correction filed on \_\_\_\_\_ is: a) ☐ approved b) ☐ disapproved by the Examiner.  
If approved, corrected drawings are required in reply to this Office action.
- 12) ☐ The oath or declaration is objected to by the Examiner.

### Priority under 35 U.S.C. §§ 119 and 120

- 13) ☐ Acknowledgment is made of a claim for foreign priority under 35 U.S.C. § 119(a)-(d) or (f).  
a) ☐ All b) ☐ Some \* c) ☐ None of:  
1. ☐ Certified copies of the priority documents have been received.  
2. ☐ Certified copies of the priority documents have been received in Application No. \_\_\_\_\_.  
3. ☐ Copies of the certified copies of the priority documents have been received in this National Stage application from the International Bureau (PCT Rule 17.2(a)).  
\* See the attached detailed Office action for a list of the certified copies not received.
- 14) ☐ Acknowledgment is made of a claim for domestic priority under 35 U.S.C. § 119(e) (to a provisional application).  
a) ☐ The translation of the foreign language provisional application has been received.
- 15) ☒ Acknowledgment is made of a claim for domestic priority under 35 U.S.C. §§ 120 and/or 121.

### Attachment(s)

- 1) ☒ Notice of References Cited (PTO-892) 4) ☐ Interview Summary (PTO-413) Paper No(s). \_\_\_\_\_
- 2) ☐ Notice of Draftsperson's Patent Drawing Review (PTO-948) 5) ☐ Notice of Informal Patent Application (PTO-152)
- 3) ☒ Information Disclosure Statement(s) (PTO-1449) Paper No(s) 6. 6) ☐ Other: \_\_\_\_\_

## **DETAILED ACTION**

### ***Election/Restrictions***

1. Applicant's amendment of claims 14-15 and 34 filed 10/4/01 in Paper No. 9 is acknowledged and has been entered. Applicant's election of Group 1, claims 1-13, with traverse, is also acknowledged and has been entered. Accordingly, claims 1-46 are pending.
2. Applicant's traversal of the restriction requirement is acknowledged. The traversal is on the grounds that the inventions of Groups I, II, and V are not independent and distinct each from the other.

In response, Applicant's argument with regards to Group II in relation to Group I is persuasive. Accordingly, claims 14 and 15 have been rejoined with the claims of Group I.

Applicant's argument with regards to Group V; however, is not persuasive because the limitations and requirements of claims 34-46 in Group V are distinct and independent from those set forth in claims 1-13 and 14-15 of Group I. Literature search for each of these methods is distinct since the structural requirements of each invention are different. While searches would be expected to overlap, there is no reason to expect the searches to be coextensive.

This record clearly indicates that the delineated inventions are in fact patentably distinct each from the other and independent from the other. This requirement has been deemed proper and is, therefore, made FINAL.

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Accordingly, claims 1-46 are pending. Claims 1-15 are under examination.

### ***Drawings***

3. This application has been filed with informal drawings which are acceptable for examination purposes only. The drawings in this application are also objected to by the Draftsperson (see PTO-948 attached). Correction is required. However, formal correction of noted defect can be deferred until application is allowed by the examiner.

### ***Information Disclosure Statement***

4. The Information Disclosure Statement (PTO-1449) filed 5/21/01 in Paper number 6 is acknowledged. The following references, Lataster et al., Kimmel et al., Whesel et al., and Meltzer et al. were not considered because neither a copy, an English translation nor a statement of relevancy was provided therefor.

### ***Claim Rejections - 35 USC § 112***

The following is a quotation of the second paragraph of 35 U.S.C. 112:

The specification shall conclude with one or more claims particularly pointing out and distinctly claiming the subject matter which the applicant regards as his invention.

5. Claims 1-15 are rejected under 35 U.S.C. 112, second paragraph, as being indefinite for failing to particularly point out and distinctly claim the subject matter which applicant regards as the invention.

Claim 1, line 5 is indefinite in reciting, "substantially normal" because the phrase "substantially normal" is a subjective phrase which lacks a comparative basis for defining its metes and bounds.

Claim 1, line 6 lacks clear antecedent support in reciting, "the selectively activatable layer overlying the specimen".

Claims 2-15 have improper antecedent basis problems in reciting, "A process ... according to claim ...".

Claim 3 lacks antecedent support in reciting, "the selectively activatable layer overlying the desired target".

Claim 4 is indefinite in reciting, "includes" because it is unclear what other elements are "included" in the method step.

Claim 4 is ambiguous and lacks clear antecedent support in reciting, "where the selectively activating step includes: forming a mechanical bond with the targeted portion of the specimen" since there is a "selectively activating" step in claim 1 from which it depends and a "selectively activating" step in claim 3 which depends also from claim 1.

Claim 5 is non-idiomatic and, therefore, confusing in reciting "prepared". Further, it is unclear what is encompassed by the term "prepared surface" as recited in the claim.

Claim 5 is vague and indefinite in reciting, "components of the targeted specimen" because it is unclear what is encompassed by the term "components" as used in the claim.

Claim 7 is indefinite for using parenthetical symbols because it is unclear whether the limitations within the parentheses are a part of the claimed invention.

Claim 8 is indefinite in reciting, "substantially normal" because the phrase "substantially normal" is a subjective phrase which lacks a comparative basis for defining its metes and bounds.

Claim 8 is ambiguous and lacks clear antecedent support in reciting, "removing the laser activation".

Claim 9 is ambiguous in reciting, "having the steps of: the allowing the volumetric expansion to cool step ...". Please clarify. Alternatively, claim 9 fails to recite a positive and active method step in the claim.

Claim 9 has improper antecedent basis problems in reciting, "a remainder of the specimen", second occurrence.

Claim 10 is ambiguous in reciting, "having the steps of: the allowing the volumetric expansion to cool step ...". Please clarify. Alternatively, claim 10 fails to recite a positive and active method step in the claim.

Claim 10 has improper antecedent basis problems in reciting, "a remainder of the specimen", second occurrence.

Claim 11 is indefinite in reciting, "includes" because it is unclear what other elements are "included" in the method step.

Claim 12 is ambiguous in reciting, "having the steps of: the activating layer includes ...". Please clarify. Alternatively, claim 12 fails to recite a positive and active method step in the claim.

Claim 13 is ambiguous in reciting, "having the steps of: the activating layer is attached to ...". Please clarify. Alternatively, claim 13 fails to recite a positive and active method step in the claim.

Claim 14 is indefinite in reciting, "includes" because it is unclear what other elements or method steps are "included" in the claim.

Claim 15 is ambiguous in reciting, "volumetric expansion includes the heating and expanding of the first inner volume includes ...". Please clarify. Alternatively, claim 15 fails to recite a positive and active method step in the claim.

### ***Claim Rejections - 35 USC § 102***

The following is a quotation of the appropriate paragraphs of 35 U.S.C. 102 that form the basis for the rejections under this section made in this Office action:

A person shall be entitled to a patent unless –

(e) the invention was described in a patent granted on an application for patent by another filed in the United States before the invention thereof by the applicant for patent, or on an international application by another who has fulfilled the requirements of paragraphs (1), (2), and (4) of section 371(c) of this title before the invention thereof by the applicant for patent.

The changes made to 35 U.S.C. 102(e) by the American Inventors Protection Act of 1999 (AIPA) do not apply to the examination of this application as the application being examined was not (1) filed on or after November 29, 2000, or (2) voluntarily published under 35 U.S.C. 122(b). Therefore, this application is examined under 35 U.S.C. 102(e) prior to the amendment by the AIPA (pre-AIPA 35 U.S.C. 102(e)).

6. Claims 1-15 are rejected under 35 U.S.C. 102(e) as being anticipated by Goldstein et al. (US 6,100,051).

Goldstein et al. disclose a process of laser capture microdissection from a specimen by selectively activating a selectively activatable layer (convex surface) causing a volumetric expansion of the layer. The activatable layer upon activation by a laser provides adhesive properties. The activatable layer is provided with a supporting substrate (distal end of a rod) and has a prepared adhesive transfer surface which forms a mechanical bond (maintains adhesion) to a portion of the specimen that is separated from the remainder of the specimen for visualization and analysis. The selectively activatable tissue is utilized to contact and capture targeted elements within a specimen, i.e. tissue sample (see Abstract and column 3). Goldstein et al. specifically disclose that the selectively activatable layer is made of heat (thermally) activatable materials which include strong long chain thermoplastic polymers and which undergo heat generated volumetric expansion such as ethylene vinyl acetate (EVA). EVA is preferred for its intrinsic absorption capability at 3 to about 10 micrometers (see columns 8-9 and column 11, lines 50-667). Solvents added thereto for solutions of hot-melt adhesive are matched for degree of effectiveness of the process and characteristics of the layer including evenness, smoothness, depth of the layer, and rate of cooling (drying) (see column 13).

7. No claims are allowed.



***Remarks***

8. Prior art made of record are not relied upon but considered pertinent to the applicants' disclosure:

Bonner et al. (US 6,251,516) disclose isolation of cellular material using laser microdissection; extraction is achieved by activation of a transfer surface that contacts a tissue portion for separation.

Liotta et al. (US 6,010,888) disclose directly dissecting cellular material using a selectively activatable transfer surface for separating tissue samples.

Liotta et al. (US 5,843,657) disclose direct extraction of cellular material from tissue sections using a selectively activatable transfer surface to remove desired tissue.

9. Any inquiry concerning this communication or earlier communications from the examiner should be directed to Gailene R. Gabel whose telephone number is (703) 305-0807. The examiner can normally be reached on Mon to Thur, 6:30 AM - 4:00 PM and alt Fri.

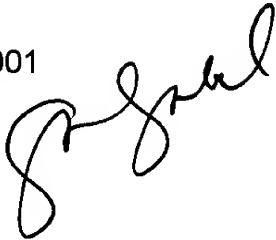
If attempts to reach the examiner by telephone are unsuccessful, the examiner's supervisor, Long Le can be reached on (703) 308-3399. The fax phone numbers for the organization where this application or proceeding is assigned are (703) 308-4242 for regular communications and (703) 308-4242 for After Final communications.

Any inquiry of a general nature or relating to the status of this application or proceeding should be directed to the receptionist whose telephone number is (703) 308-0196.

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Gailene R. Gabel  
Patent Examiner  
Art Unit 1641  
December 17, 2001



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12/17/01